

①² applying extrudate along a second segment of the pane, with the second segment extruded on at least a portion of the first segment and the extrudate forming a superposed region defined by contact between the segments;

allowing a shaped surface of the tool to contact and fashion the superposed region.

☒ Please add the following claims:

①³ ~~9~~
~~35.~~ (New) Process according to Claim 1, wherein the object is a pane.

~~4~~
~~34.~~ (New) Process according to Claim 2, wherein the die is moved relative to the object by rotation through a desired angle.

Remarks

Claims 1-7 and 20-34 are pending in the present application, including amended claims 1, 2 and 20 and new claims 33-34.

Applicants seek approval to amend Fig. 4 as shown in red in the attached drawing. In the Office Action, the drawings were objected to because "the 'upper portion and lower portion' of the shaped surface (see claims 27 and 28) must be shown or the feature(s) canceled from the claim(s)." A proposed amended Fig. 4 is submitted herewith indicating upper portion 20a and lower portion 18a. A proposed amendment to the specification also is submitted herewith to include designations 20a and 18a. No new matter is believed to have been added.

Applicants appreciate the Examiner's indication in the Office Action that claim 1 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. § 112, second paragraph, and that claims 2-7 are allowable if rewritten to overcome the rejection(s) under 35 U.S.C. § 112, second paragraph, and to include all of the limitations of the base claim and any intervening claims.

Claims 1-7 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Office Action stated:

In the present instance, claim 1 recites the broad recitation "an object", and the claim also recites "a pane" which is the narrower statement of the range/limitation. In this case, "in particular" is equivalent to the meaning of the phrase "such as".

In response, Applicants have amended claim 1 to remove the phrase "in particular a pane." Claim 1 has been further amended for clarification purposes. The Office Action also stated the following with respect to claim 2:

The phrase "especially in a corner of the object" is generally confusing an indefinite because it is unclear if a corner in the profiled bead can occur at a location other than at a corner of the object.

In response, Applicants have amended claim 2 to recite a process according to Claim 1, wherein the die is moved relative to the object by changing the relative orientation of the die with respect to the object, and by guiding the die in the new direction thus obtained to fashion a corner in the profiled bead.

With respect to the statement in the Office Action that "[i]t is noted that the instant specification and drawings do not support a forming corner in the profiled bead at a location other than at a corner of a pane," (page 4) Applicants respectfully disagree. The present application relates, in part, to a process for the fashioning of a portion of a profiled bead extruded onto an object. While an example of the process is described in the specification – employing a tool placed at a corner of a pane – this example is non-limiting.

Claim 20 was rejected under 35 U.S.C. § 112, first paragraph. With respect to the limitation "with the second segment at least partially intersecting the first segment," the Office Action stated that the limitation "is not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention." Applicants respectfully disagree. However, for clarification purposes, claim 20 has been amended to recite a process for using a tool to fashion extrudate on a pane comprising: applying extrudate along a first segment of the pane; applying extrudate along a second segment of the pane, with the second segment extruded on at least a portion of the first segment and the extrudate forming a superposed region defined by contact between the segments; allowing a shaped surface of the tool to contact and fashion the superposed region.

Claim 25 was rejected under 35 U.S.C. § 112, first paragraph. With respect to the limitation “disposed proximate at least one edge,” the Office Action stated that “[s]pecifically, the original specification is silent with regard to the location of the extruded segments in relation to the edge/side of a pane.” Applicants respectfully disagree. For example, the specification states that the “extrusion die deposits, directly along one edge, a profiled bead 2 of thermoplastic elastomer (TPE) on the upwardly facing main face of the pane 1.” (Clean version of Specification filed April 1, 2002; Page 6, lines 29-30). The specification also states that “the sealing rim 16 is applied against the external edge (end face) of the pane 1 in the working position of the tool 5.” (*Id.* at Page 9, lines 15-16). The figures of the application also support the limitation “disposed proximate at least one edge,” for example, profiled bead 2 shown on pane 1 in Fig. 1. Thus, it is believed that the rejection of claim 25 under 35 U.S.C. § 112, first paragraph has been traversed.

Claims 27 and 28 were rejected under 35 U.S.C. § 112, first paragraph, with respect to the limitation “the upper portion and lower portion” of claim 27 and the limitation “upper and lower portions of the shaped surface” of claim 28. The Office Action stated that these limitations are “not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.” Applicants respectfully disagree. For example, the specification states that “[i]n the region of accumulation of material...a cavity or tunnel is now formed...the cross section of which corresponds to the normal profile of the profiled bead and is bounded or circumscribed by...the surface of the lower mould part as far as the end of the cutting edge (below the lip)” and “the lower face of the compression punch as far as the gasket.” (*Id.* at Page 10, lines 22-29). Also, as shown in Fig. 4, profiled bead 2 is formed, for example, between the upper portion of mould part 18 and the lower portion of punch 20. Thus, it is believed that the rejections of claims 27 and 28 under 35 U.S.C. § 112, first paragraph have been traversed.

Claim 29 was rejected under 35 U.S.C. § 112, first paragraph. With respect to the limitation “disposed proximate two edges,” the Office Action stated that “[s]pecifically, the original specification is silent with regard to the location of the superposed region in

relation to the edge/side of a pane.” Applicants respectfully disagree. For example, the specification states:

In Figure 2, an accumulation 4 of TPE has been produced at a corner 3 of the pane 1. In the present case, the die D, being guided along a first side of the pane in the direction of the arrow Fa, has for this purpose been brought beyond the corner 3 when it has reached the corner region and has been taken away from the edge of the window. Thus, a first bead segment 2a is formed, which includes the portion to be fashioned into a corner. Next, the die is rotated and again placed on the same corner 3. By guiding the die in the new direction of advance along the following side, in the direction of the arrow Fb, a second bead segment 2b is formed.

(*Id.* at Page 7, lines 3-10; Fig. 2). Thus, it is believed that the rejection of claim 29 under 35 U.S.C. § 112, first paragraph has been traversed.

Claim 30 was rejected under 35 U.S.C. § 112, first paragraph. With respect to the limitations “first position remote” and “second position proximate,” the Office Action stated that these limitations are “not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.” Applicants respectfully disagree. For example, the specification states:

In the rest position and during transfer of the tool into its working position, the punch 20 is raised. The opening between the punch 20 and the lower mould part must be large enough for the raised punch 20 and the gasket 23 not to come into contact with the profiled bead 2 while the tool is being brought into the working position. ¶ After the tool has been automatically aligned on the corner of the pane, the punch 20 is lowered onto the pane 1 using the cylinder 21.

(*Id.* at Page 10, lines 16-21; Figs. 3-4). Clearly, as described in the specification and shown in the embodiment of Figs. 3-4, the rest position of the tool may be remote from the superposed region of profiled bead 2, while the working position of the tool may be proximate the superposed region. Thus, it is believed that the rejection of claim 30 under 35 U.S.C. § 112, first paragraph has been traversed.

Claim 31 was rejected under 35 U.S.C. § 112, first paragraph. With respect to the limitation “aligning,” the Office Action stated that this limitation was “not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that

the inventor(s), at the time the application was filed, had possession of the claimed invention.” Applicants respectfully disagree. For example, the abstract states:

Advantageously, the tool (5) is, according to the invention, automatically aligned on the profiled bead (2), immediately after the accumulated material (4) has been extruded and after the extrusion die (D) has continued its travel, without moving the object, and is brought into contact with this bead.

(*Id.* at Abstract, lines 10-13). The specification also states that “[a]fter the tool has been automatically aligned on the corner of the pane...[i]n the region of accumulation of material, i.e. in the acute angle, a cavity or tunnel is now formed.” (*Id.* at Page 10, lines 20-23). Thus, it is believed that the rejection of claim 31 under 35 U.S.C. § 112, first paragraph has been traversed.

A fee for the addition of two dependent claims is believed to be due for this submission and a Fee Transmittal Sheet is submitted concurrently herewith. A fee for an extension of time also is believed to be due for this submission and a petition for extension of time is submitted concurrently herewith. Should any other fees be required, however, please charge such fees to Pennie & Edmonds LLP Deposit Account No. 16-1150.

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Respectfully submitted,

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Enclosures



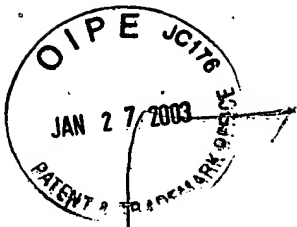
Application No. 09/529,672

EXHIBIT B - MARKED-UP PARAGRAPH
IN AMENDMENT FILED JANUARY 27, 2003

Specification, page 10, lines 20-30:

After the tool has been automatically aligned on the corner of the pane, the punch 20 is lowered onto the pane 1 using the cylinder 21. Thus, the gasket is placed directly on the top side of the pane 1. In the region of accumulation of material, i.e. in the acute angle, a cavity or tunnel is now formed which is open on either side of the corner 3 and the cross section of which corresponds to the normal profile of the profiled bead and is bounded or circumscribed by:

- the top side of the pane (on the contact surface provided);
- the surface of the lower mould part, shown for example in Fig. 4 as upper portion 18a of mould part 18, as far as the end of the cutting edge (below the lip);
- the lower face of the compression punch, shown for example in Fig. 4 as lower portion 20a of punch 20, as far as the gasket; and
- the perimeter of the gasket lying on the side facing the edge of the pane.



Application No. 09/529,672

**EXHIBIT C - CLEAN COPY OF PARAGRAPH
IN AMENDMENT FILED JANUARY 27, 2003**

Specification, page 10, lines 20-30:

④ After the tool has been automatically aligned on the corner of the pane, the punch 20 is lowered onto the pane 1 using the cylinder 21. Thus, the gasket is placed directly on the top side of the pane 1. In the region of accumulation of material, i.e. in the acute angle, a cavity or tunnel is now formed which is open on either side of the corner 3 and the cross section of which corresponds to the normal profile of the profiled bead and is bounded or circumscribed by:

- the top side of the pane (on the contact surface provided);
- the surface of the lower mould part, shown for example in Fig. 4 as upper portion 18a of mould part 18, as far as the end of the cutting edge (below the lip);
- the lower face of the compression punch, shown for example in Fig. 4 as lower portion 20a of punch 20, as far as the gasket; and
- the perimeter of the gasket lying on the side facing the edge of the pane.



Application No. 09/529,672

**EXHIBIT D - MARKED-UP VERSION OF
AMENDED CLAIMS AND NEW CLAIMS FILED JANUARY 27, 2003**

1. (Three times amended) In a process for the fashioning of a portion of a profiled bead extruded along [a] an intended path onto an object, [in particular a pane,] in which process an initially shapeless mass of material is produced in the portion and is given a desired final shape by contact with a shaped surface of a moving tool, with any excess material being automatically expelled from the tool in order to be removed, the improvement wherein the mass of material is produced by the superposition of two segments of the extruded strip, with the steps of:

guiding an extrusion die along a first segment of the intended path of a profiled bead, including the portion to be fashioned;

moving the die away from the object and, relative to the object, to an adjacent position of the portion to be fashioned; and

guiding the die along a second segment of the path of the profiled bead, also including the portion to be fashioned.

2. (Three times amended) Process according to Claim 1 [for the fashioning of a corner in the profiled bead, especially in a corner of the object], wherein the die is moved relative to the object by changing the relative orientation of the die with respect to the object, [especially by rotation through a desired angle,] and by guiding the die in the new direction thus obtained to fashion a corner in the profiled bead.

20. (Amended) A process for using a tool to fashion extrudate on a pane comprising:

applying extrudate along a first segment of the pane;

applying extrudate along a second segment of the pane, with the second segment [at least partially intersecting] extruded on at least a portion of the first segment and the extrudate forming a superposed region defined by contact between the segments;

allowing a shaped surface of the tool to contact and fashion the superposed region.

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33. (New) Process according to Claim 1, wherein the object is a pane.
34. (New) Process according to Claim 2, wherein the die is moved relative to the object by rotation through a desired angle.



Application No. 09/529,672

EXHIBIT E - CLEAN COPY OF THE CLAIMS
PENDING AS OF JANUARY 27, 2003

1. (Three times amended) In a process for the fashioning of a portion of a profiled bead extruded along an intended path onto an object, in which process an initially shapeless mass of material is produced in the portion and is given a desired final shape by contact with a shaped surface of a moving tool, with any excess material being automatically expelled from the tool in order to be removed, the improvement wherein the mass of material is produced by the superposition of two segments of the extruded strip, with the steps of:
 - guiding an extrusion die along a first segment of the intended path of a profiled bead, including the portion to be fashioned;
 - moving the die away from the object and, relative to the object, to an adjacent position of the portion to be fashioned; and
 - guiding the die along a second segment of the path of the profiled bead, also including the portion to be fashioned.
2. (Three times amended) Process according to Claim 1, wherein the die is moved relative to the object by changing the relative orientation of the die with respect to the object, and by guiding the die in the new direction thus obtained to fashion a corner in the profiled bead.
3. Process according to Claim 2, wherein at least one of the first and second segment extends beyond the perimeter of the object so that the fashioned portion projects beyond an end face of the object.
4. Process according to claim 1, wherein after the first segment has been extruded, the die is moved by passing it over a region of the first segment which includes the portion to be fashioned.
5. Process according to claim 1, wherein the extrudable material continues to be delivered by the die while the latter is being moved.

6. Process according to claim 1, wherein the moving tool is applied against the portion to be fashioned just after the die has left that region of the second segment which includes this portion, in the actual extrusion station, without the object being moved, transferred or repositioned.

7. Process according to Claim 6, wherein the moving tool is automatically brought from a rest position to its working position immediately after the mass has been extruded and the extrusion die has continued its travel, is automatically aligned with the profiled bead and is brought into contact with the shapeless mass in order to fashion it.

20. (Amended) A process for using a tool to fashion extrudate on a pane comprising:

- applying extrudate along a first segment of the pane;
- applying extrudate along a second segment of the pane, with the second segment extruded on at least a portion of the first segment and the extrudate forming a superposed region defined by contact between the segments;
- allowing a shaped surface of the tool to contact and fashion the superposed region.

21. The process of claim 20, wherein the extrudate is applied by an extrusion die.

22. The process of claim 20, wherein the extrudate comprises a profiled bead.

23. The process of claim 20, wherein the superposed region is fashioned into a first portion for curing and a second portion for removal.

24. The process of claim 23, further comprising:
removing the second portion of the superposed region.

25. The process of claim 20, wherein the first and second segments are disposed proximate at least one edge of the pane.

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26. The process of claim 20, further comprising:
heating the tool.
27. The process of claim 20, wherein the shaped surface comprises an upper portion and a lower portion.
28. The process of claim 27, further comprising:
allowing a portion of the extrudate to flow between the upper and lower portions of the shaped surface to form a lip.
29. The process of claim 20, wherein the superposed region is disposed proximate two edges of the pane.
30. The process of claim 20, further comprising:
moving the tool from a first position remote from the superposed region to a second position proximate the superposed region.
31. The process of claim 20, further comprising:
aligning the tool with the superposed region.
32. The process of claim 20, wherein the extrudate is applied to the first and second segments by an uninterrupted extrusion.
33. (New) Process according to Claim 1, wherein the object is a pane.
34. (New) Process according to Claim 2, wherein the die is moved relative to the object by rotation through a desired angle.